
ELECTRICITY INDUSTRY UPDATE - JANUARY 2024

# VIEW FROM THE CHIEF EXECUTIVE

**Editorial from Peter Berry**

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Welcome back everyone, ngā mihi o te tau hou. I hope everyone had a restful and uneventful break.

No doubt you all had a busy week in the lead into Christmas and may have missed two great Energy News articles about our President Josie Boyd and our FlexTalk project. Subscribers to Energy News can read them here

- **An interview with President Josie Boyd**, and
- **An update on our FlexTalk Project**

It has been a busy start to the year here at the EEA and we have another bumper newsletter

Firstly, a huge congratulations to Michael Whaley for his Engineering New Zealand Fellowship award. Many of you will know Michael who has served on our Executive Committee since 2007. Over the years, Mike has been involved with, and led delivery on key work in Asset Management, engineering capability, technical standards and many other areas. Through his active engagement and influence, Mike has shaped the way we operate today.

As our industry faces significant change, we need more people to get involved just as Mike has, be they young engineers or senior specialists, health and safety or technical experts. All skills are needed to help the industry embrace new thinking, technology and regulation as we transition to a zero-carbon future.

We are currently seeking people to get involved in the enhancement of our Safety Statistics Survey and in the development of our diversity, equity and inclusion working group. Find out how you can get involved in those below.

Planning is underway for several events you should get into your calendars and register for – our latest FlexTalk webinar, the Health and Safety Workshop, our Trainers Forum and of course, the annual EEA Conference with registrations and call for papers opening on February 1! More details on each of these events is below.

Finally, this week we provided feedback to Energy Efficiency and Conservation Authority (EECA) on its energy levies funding proposal for 2024/25. This year's consultation period was later and shorter than usual due to the change of Government but no less important. **You can read our submission here**.

Nga mihi nui,

Peter Berry
Chief Executive


## Executive Committee member Michael Whaley awarded Engineering New Zealand Fellowship

Congratulations to Michael Whaley FEngNZ, BBus, BEng, CPEng, who has been awarded the

have made a huge impact on engineering in New Zealand.

Michael has worked as an engineer for over 30 years in the electricity transmission and distribution sector. He has served on the Electricity Engineers Association committee since 2007 and has convened our Asset Management Group, Capability Development Group and various other national working groups. He takes a special interest in training and development, mentoring of other technical professionals, defining and solving technical problems, and how infrastructure organisations go about fulfilling their objectives.

Read more from Michael in our **Executive Committee Question and Answer series on the website.**

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## Conference EEA2024 - call for papers and registrations open February 1!

The EEA annual Conference and Technology Exhibition in Ōtautahi / Christchurch on 10 - 12 September 2024 is not to be missed whether as an exhibitor, presenter or delegate! Our 2023 conference attracted over 1,200 delegates and visitors and more than 60 technical presentations. This is your chance to be part of it.

**Registrations** open on February 1 so get one task off the list early in the year by booking your place at our industry's premier engineering and technical event.

**Exhibitors**, we have only a few stands left so if you haven't made up your mind yet – don't delay any longer. **Book your exhibition space now!**

**Do you have an idea for a paper to present?** EEA2024 is a fantastic opportunity for you to profile and share new knowledge, practices or technology. It's also a platform for a company or individual to get recognition as an engineering leader. We are looking for papers on the challenges and opportunities as we transition to a low carbon economy by 2050. Plus – you could win a Best Paper or People's Choice award.

**Visit the conference website for more information here.**

## Proud to support our next generation engineers with tertiary scholarships

The EEA is proud to support our next generation of engineers with several undergraduate scholarships available to students at the University of Auckland, University of Canterbury and the Auckland University of Technology.

As students begin their transition into tertiary education, our scholarships are a way to ease some of the worry that can come with such a big change. It is also a way for us to highlight the amazing new talent that we see emerging in our industry.

More than 80 students from the three Universities have benefited from an EEA scholarship, since its establishment in 1996.

One recent recipient, Lachlan Pearce wrote the following in a letter to the EEA, helping us all end the year on a high.

*"Receiving the scholarship has been a tremendous honour and privilege for me. It will allow me to pursue my academic aspirations without the worry of financial constraints, and I cannot emphasize enough how much of a positive impact it will have on my life. Thanks to your support, I can now focus wholeheartedly on my studies and make the most of this incredible opportunity. Your belief in my potential and commitment to investing in education are truly inspiring."*

**More information about our scholarships is available on our website.**

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## Be part of fostering diversity, equity and inclusion across our industry

The EEA is establishing a diversity, equity and inclusion (DEI) reference group to support our industry to deliver on the principles of DEI and achieve better outcomes overall. This follows our 2023 Conference where a panel discussion on this topic was well-supported and championed.

As a first step, we need to develop a terms of reference and work programme for the group and are seeking input from people in our industry with particular expertise in the field of DEI.

These will be people who either currently hold, or have previously played, a significant role in DEI initiatives and can assist with setting the scene for our future.

If you have someone in your organisation that fits this description and is enthusiastic about helping us create the framework for this new group, contact **Hayley@eea.co.nz** by Thursday February 29.

people to join the group and deliver on the work programme.

## Seeking input on draft amendments relating to inverters: AS/NZS 4777.1:2023 and AS/NZS 4777.2:2020

The above standards are part of a series relating to inverters used in New Zealand. Standards NZ are seeking public comment upon draft amendments to the standards.

The EEA is a member of the AS/NZS committee responsible for this standard (EL 42) and would appreciate your consideration and any comments by **19 February 2024**.

The drafts relate to:

1. AS/NZS 4777.1 Grid connection of energy systems via inverters, Part 1: Installation requirements (this Standard).
2. AS/NZS 4777.2 Grid connection of energy systems via inverters, Part 2: Inverter requirements.

For more information and detail on visit the **Standards NZ website**. Any comments can be sent to **Stuart@eea.co.nz**.


## Health & Safety Workshop - Call for papers

Our annual Health and Safety Workshop will be back in 2024 – mark your calendars for July 17-18.

Held at the Harbourside Event Centre in Wellington, this is a fantastic chance to meet new people, share ideas and learn about the great work happening across the industry.

This year's theme is Back to Basics. If you or your organisation are involved in some great health, safety or wellbeing initiatives and want to share what you are doing, or if you have any

Contact **hayley@eea.co.nz** or give her a call on 027 7024746 to have a chat, no project is too big or small. You can find presentations from previous years' workshops on **our website**.

## Safety statistics survey - your help is needed to make improvements

The ESI Safety Statistics report is in its final stages of preparation for sharing with industry.

In the meantime, we are keen to ensure that the report remains a meaningful resource and are seeking people to help evolve our survey and ensure the outcome is something that meets industry needs. This comes as the Business Leaders' Health and Safety Forum have opted to stop running their survey.

We are seeking people interested in helping us to improve the survey and report. If you are keen to be involved in a short-term working group, please contact **hayley@eea.co.nz** or give her a call on 027 7024746.

## Safety Standards and Procedures Group

### Learn more about our work

The SSPG is hitting the road this year, keen to visit you and your organsiation! They have been involved in the development of many industry resources and want to see as many of you as possible, using them!

The group would love the opportunity to visit your organisation and demonstrate how to make the most of what's available through the EEA and the Knowledge Network. If you are keen to know more, please contact **hayley@eea.co.nz** or give her a call on 027 7024746.

### Guide no longer available: Management of Blue Indicating Silica Gel

This guide is no longer available to purchase through the EEA website or the Knowledge Network as it is no longer required. The use of blue indicating silica gel, used as a drying agent in transformer breathers, has been phased out.


# Addressing industry concerns

*This article was first published in our December 2023 newsletter. Given the importance of the issue we are sharing it again – join the **Live Work Forum on the Knowledge Network** for more conversation and discussion on live work. Not a member of the Knowledge Network? **Click here to register**.*

Live line work methods are important procedures used in the electricity supply industry. The EEA National Committee on Live Work's (NCLW) focus is on providing best current thinking on eliminating or minimising the risk of harm when high voltage (HV) live line work is the appropriate work method.

NCLW have recently considered two industry concerns – the 'Hot Stick' work method and the growing use of HV live line procedures on isolated lines and equipment.

## Hot Stick Preference

The NCLW wants to remind industry that to minimise the risk of harm when making or breaking HV connections using a HV live line work method, the use of the 'hot stick' method is recommended.

This method ensures greater distance between the worker and point of connection, meaning the possible exposure of a worker in the event of an arc flash, is minimised.

It is also important that any action to make or break connections using a HV live method must be justified and subject to approval from the network operator.

The committee will review the existing model procedures to ensure this recommendation is promoted in the relevant procedures.

## Use of HV Live Line Procedures on Isolated Lines and Equipment

The National Committee on Live Work (NCLW) has also been asked about the use of high voltage live line work methods on isolated lines and equipment.

Discussion is around the point that by isolating lines and equipment, an additional level of control is applied when undertaking HV Live Line work.

The NCLW has considered this and supports isolation, as a practical step in minimising risk of harm.

- The isolation is recorded as a control on the HV live line work permit, similar to how industry record the application of a recloser block. Note: a HV live line permit and access permit shall not be issued for the same work.
- The work is undertaken in strict compliance with the HV live line work method being used.
- At all times, the isolated lines and equipment must be treated as live and the HV live line worker must not encroach the live line minimum approach distance applicable to the work method.
- Work shall stop immediately when a problem arises and must not recommence until the problem is resolved.
- This work shall be monitored and audited in accordance with live line requirements.



## FlexTalk trials 99% complete - Register for latest webinar

Our joint EEA, EECA and industry FlexTalk project activating demand flexibility through the trial of a common communication protocol is in its final phase!

Live (customer), two-way communication trials are almost complete, and the team have begun work on the development of a technical guide for industry. This guide and a summary of our trial is due for completion in early April.

In the meantime, we are hosting a webinar on 14 February where our research partner EA Technology will talk about the findings of their review into international best practice - what's being used around the globe and what is the rationale for adoption? Plus we will

Finally, in December, we published a visual summary of progress to date which you **can read here**.

## Power Quality Guide

The EEA's Asset Management Group has released an updated Power Quality Guide for anyone who works with electricity systems. The AMG would like to acknowledge Prof. Neville Watson, University of Canterbury, Michael Whaley, M W Consultants and Robin Pittwood, Powerco for their contributions to the reviewed guide.

Get your copy now from the **Knowledge Network**. It's free for EEA members.

This guide is based upon research and international standards. It intended to provide general guidance on the management of power quality disturbances, to ensure that they stay small and do not interfere with customer equipment.

Poor power quality can result in equipment malfunctions, energy waste, and operational inefficiencies. By understanding and managing power quality within safe users can significantly reduce operational risks, improve efficiency, and reduce costs.

Last updated in 2013, this 2024 version includes updates on:

- Waveforms of harmonic producing equipment
- Interharmonics updated based on latest international trends
- Subgroup concept for interharmonics and harmonics
- Ferroresonance
- Geomagnetically induced currents
- DC current injection
- Common mode voltages
- More background on various phenomena


## Trainers' Forum

Registration Board on what's happening with the new licencing regime, Connexis will discuss how they support companies to upskill their workforce, and the EEA will discuss how we can support industry training.

We would also love to hear your suggestions on what else we can do to support your future training needs. The program will be finalised by the end of February so head over to the **EEA events page** to enroll in this great networking event.

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## Incident Cause Analysis Method (ICAM) training

Do you have people keen to attend an ICAM (Incident Cause Analysis Method) investigation course?

The ICAM course introduces best practice in incident investigation, understanding and applying root cause investigation methodology, and teaches practical skills to apply in the workplace.

We are keen to have Safety Wise run their industry specific course for us again, but we require minimum numbers. If you have interested people in your organisation, please **contact the EEA**.

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## Let EEA help with professional development in 2024

January is a fantastic time for planning for the year ahead including how to meet the professional development needs of you and your team.

The EEA have worked with industry to develop a common, structured programme of learning and development, that supports current and future industry needs.

All our courses and micro-credentials are **listed in this booklet** which makes it easy for you to pick the ones that best suits you, your team and your organisation.

Courses use 'blended learning' and have been designed to fit around full-time work. They are delivered via a mix of self-directed online learning, webinars (led by industry subject matter experts) and written (scenario-based) assessments.

Alternatively, get in touch with Rob McCrone, to discuss a tailored solution for you on **admin@eea.co.nz**.


## Looking ahead

To keep up to date with all of the EEA's activities and projects or to register for an event please visit the **Upcoming EEA Events page** on the EEA website.

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| 1 February | Abstract submissions and registrations open EEA Conference and Technology Exhibition 2024<br>**https://confer.nz/eea2024/exhibition/** |
| 13 February | **Executive Committee** meeting |
| 14 February | Flextalk Webinar: International insights, what we have learnt.<br>**Register here** |
| 19 February | Consultation: Input into AS/NZS 4777.1:2023 and AS/NZS 4777.2:2020 due to the EEA.<br>**https://www.standards.govt.nz/develop-standards/comment-on-draft-standards/joint-draft-standards/** |
| 5-6 March | **Downstream24 – Lower Hutt Events Centre**<br>EEA is a proud supporter of Downstream |
| 12 March | **Executive Committee** meeting |
| 17 April | Abstract submissions close - EEA Conference and Technology Exhibition 2024 |
| 18 April | EEA ESI Trainers Forum |
| 5-6 June | **High Voltage & Arc Flash Conference** – Auckland<br><br>Hosted by IDC Technologies. The conference is seeking electrical engineers, technologists or technicians working with high voltage systems and arc flash safety in utilities, mining, industrial plants, oil and gas or manufacturing to submit a topic idea and present their papers. |
| 9 August | Full papers due - EEA Conference and Technology Exhibition 2024 |
| 10-12 Sept | **EEA Annual Conference, Technology Expo and Awards** |

## Connect with the EEA

- Follow our **LinkedIn** page to see more of our outreach and comment on our work and activities.
- Join the **Knowledge Network** for access to all our guides, shared learnings and for more industry discussion.

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